The Employee Clientele of Corporate Leverage: Evidence from Personal Labor Income Diversification

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CES 18-01 **January, 2018**

Abstract

Using employee job-level data, we empirically test the equilibrium matching between a firm's debt usage and its employee job risk aversion ("clientele effect"), as predicted by the existing theories. We measure job risk aversion for a firm's employees using their labor income concentration in the firm, calculated as the fraction of the employees' total personal labor income or total household labor income that is accounted for by their income from this particular firm. Using a sample of about 1,400 U.S. public firms from 1990-2008, we find a robust negative relation between leverage and employee job risk aversion, which is consistent with the clientele effect. Specifically, when a firm's existing employees have higher labor income concentration in it, the firm tends to have lower contemporaneous and future leverage. Moreover, in terms of new hires, firms with lower leverage are more likely to recruit employees with less alternative labor income. Our results continue to hold after we control for firm fixed effects, other employee characteristics such as wages, gender, age, race, and education, and managerial risk attitudes. Further, the matching between a firm's leverage and its workers' labor income concentration in it is more pronounced for firms with higher labor intensity and those in financial distress.

Keyword*:* clientele effect, personal labor income diversification, employee job risk aversion, leverage, capital structure, Longitudinal Employer-Household Dynamics database

JEL Classification: G30, G32, G39

[*]We thank Andrew Ellul, Stu Gillan, Sara Holland, Feng Jiang, Ugur Lel, Inessa Liskovich, Jeffry Netter, Sheridan Titman, Toni Whited, and seminar participants at the University of Georgia for valuable comments. Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed. This research uses data from the Census Bureau's Longitudinal Employer Household Dynamics Program, which was partially supported by the following National Science Foundation Grants SES-9978093, SES-0339191 and ITR-0427889; National Institute on Aging Grant AG018854; and grants from the Alfred P. Sloan Foundation. Any errors and omissions are the responsibility of the authors.

1. INTRODUCTION

It is well known that firms choose their optimal capital structures to balance several tradeoffs. On the one hand, a higher level of debt will offer corporate tax savings as well as other benefits to a firm such as preventing corporate managers from squandering free cash flows. On the other hand, financial leverage increases a firm's likelihood of entering distress and even bankruptcy, imposing significant costs not only on its investors but also on its major stakeholders such as employees, customers, and suppliers. While previous literature recognizes bankruptcy costs as an important determinant of capital structure, ample empirical evidence finds that the magnitude of direct bankruptcy costs seems too small to explain the observed lack of debt usage, given the considerably larger tax savings and other benefits of using leverage. As a result, researchers have started to explore the implications of indirect bankruptcy costs, especially human costs on employees in terms of involuntary job losses and reduced worker welfare, for a firm's capital structure decisions. However, previous literature mostly focuses on either firm-level actions to deal with human capital of bankruptcy (such as improving employee treatment or adjusting wages) or country/state-level regulations on unemployment risk and employee protection, without considering the fact that employees are active decision makers who do not just take their job contracts as "take it or leave it" offers but can partially hedge their employment risk by diversifying their own or household labor income (i.e., taking on additional jobs or reallocating the "bread earning" responsibilities within their households). One objective of our paper is to fill in the gap by exploring the implication of employee personal labor income diversification for capital structure decisions.

The pioneer work of Titman (1984) proposes a model in which firms voluntarily choose lower leverage to limit their employees' human costs of bankruptcy, because if the firms want to take on more debt, they need to pay higher wage premiums to compensate their employees for the additional bankruptcy risk. Berk, Stanton, and Zechner's (2010) model further formalizes the

intuition that a firm's capital structure choice reflects its employees' risk preferences towards their jobs. In particular, they make a novel prediction of a "clientele effect" of corporate leverage with respect to employees: "…*firms with low leverage will be attractive for employees with relatively high risk aversion, whereas employees with low risk aversion will be attracted towards firms with high leverage. Ultimately, heterogeneity in risk aversion in the labor market should result in a clientele effect, implying persistent heterogeneity in the average risk aversion of employees and in capital structure choices amongst otherwise identical firms*."

The major challenge to empirically test the employee clientele effect of leverage is the difficulty of measuring employees' risk preferences towards their jobs. For example, as discussed by Berk, Stanton, and Zechner (2010), "*Because employee risk aversion is difficult to observe, its role in capital structure is difficult to test directly*." In this paper, we overcome this challenge by exploiting a worker's personal diversification of labor income risk and define employees to be more risk-averse if more of their (or their households') labor income is concentrated in their current jobs. As such, we aim to empirically test, for the first time in the literature, the employee clientele effect of corporate leverage, namely, the equilibrium matching between a company's debt level and its employees' job risk aversion. Our study extends the growing empirical literature which sheds light on the relation between labor and capital structure (e.g., Titman and Wessels, 1988; Agrawal and Matsa, 2013; Brown and Matsa, 2016).[1] While these studies investigate the relation between employee risk aversion and corporate leverage in specific settings such as industries with specialized labor or state-level unemployment insurance, we *directly* measure employees' job risk aversion at the firm level and testing its equilibrium matching to a firm's debt level (i.e., the clientele effect), which can provide a

[1] For example, Titman and Wessels (1988) find that firms in industries with more specialized labor have lower leverage. Agrawal and Matsa (2013) show that changes in state-level unemployment insurance laws have a significant impact on leverage. Using survey data of about thirty-thousand respondents, Brown and Matsa (2016) show that job seekers accurately perceive changes in a firm's distress risk, suggesting that a firm's distress-related policies such as its capital structure decision affects their recruiting outcomes.

more comprehensive picture of the dynamics between capital structure and employee risk preference.[2]

We propose two measures of employee labor income concentration by examining a worker's alternative labor income as well as the jobs of her household members. The first measure, the ratio of focal firm income to personal income (*Focal/Personal*), is the ratio of an employee's annual labor income from a firm to the employee's total annual labor income. The higher this ratio is, the lower fraction of the employee's total personal labor income comes from alternative jobs (either from other part-time or seasonal jobs or from self-employment). As a result, this employee will be more concerned with the human cost of bankruptcy (due to debt usage) from the focal firm and thus display a higher degree of job risk aversion. The second measure, the ratio of focal firm income to family income (*Focal/Family*), is the ratio of an employee's annual labor income from a firm to the total annual labor income of the employee's household. The higher *Focal/Family* is, the lower the fraction of an employee's total household labor income comes from her spouse (or other working family members). As a result, the employee will have higher job risk aversion because her negative experience during the potential distress/bankruptcy events will impose greater financial trouble and pain on herself or her family members.

To construct the above two measures of employee income concentration, we make use of the linked employer-employee micro data from the Longitudinal Employer-Household Dynamics (LEHD) program of the Census Bureau, which contains employee wage records that firms submit to state unemployment insurance (UI) offices for 19 U.S. states between 1990 and 2008. One crucial

[2] Employee risk preferences can be classified into two broad categories. The first type of risk preference is born into the employees (i.e., "generic risk preference"), which influences all types of employee behavior consistently over time. The second type of risk preference is associated with economic incentives, which can change with an employee's economic condition (i.e., "economic risk preference"). In this paper, we focus on the second type, and in particular, employees' risk preference towards their jobs (i.e., labor income), but not towards financial incomes or other economic incentives.

benefit of using the LEHD data is that it covers all the paid jobs a given individual has in a state.[3] In addition, the LEHD program identifies each person's household through tax return information and other administrative data (primarily the 1040 tax forms), which allows us to calculate the separate contribution of each family member towards household labor income. The fact that the LEHD data contains wage records of all workers employed by business establishments allows us to summarize the job risk aversion measures across employees and construct firm-level measures.

Moreover, relative to other survey-based data that have been used to analyze wage dynamics in the U.S., the LEHD has several unique advantages. First, the administrative nature of the UI records ensures that the LEHD data, while not completely error free, are less subject to the usual self-reporting problem and the associated measurement errors that plague household surveys. Second, the LEHD data includes all forms of monetary compensation paid to workers, including gross wages and salaries, bonuses, stock options, tips and other gratuities, and the value of meals and lodging (if applicable), which helps us accurately capture the total labor income an individual makes from a given job, whereas standard surveys on household income typically only include base salaries.[4]

We first construct the two employee labor income concentration measures for each worker of a firm, and then calculate the average across all employees for a firm-year to derive the firm-level employee job risk aversion measures. The final sample includes about 1,400 unique U.S. public firms, covering approximately 6,000 firm-years from 1990 to 2008.[5] Our main hypothesis is that firms with higher employee labor income concentration (i.e., those whose workers have less alternative labor

[3] To identify a person's self-employment income that is not covered by the LEHD, we make use of the Integrated Longitudinal Business Database (ILBD) also maintained by the Census Bureau, which contains comprehensive information on the income of "non-employers" defined as self-employed proprietors that do not have employees.

[4] Note that the loss in other forms of monetary compensation than one's base salary (such as bonuses, tips, travel reimbursements, or other gratuities) also represents a non-trivial form of human costs of financial distress or bankruptcy.

5 The numbers are rounded to the nearest hundred due to the disclosure requirement of the Census Bureau.

income from elsewhere or family members) have lower leverage because such firms face higher human bankruptcy costs.[6]

Consistent with the above hypothesis, our baseline OLS regressions show that firms use less debt in the capital structure when their employees have higher labor income concentration in these firms. Specifically, both the market leverage and book leverage of a firm are significantly lower when *Focal/Personal* and *Focal/Family* are higher. This result holds regardless of whether we examine contemporaneous or lagged employee labor income concentration measures. The negative association between leverage and employee labor income concentration persists even after we control for industry-year fixed effects and firm fixed effects, and is robust to controlling for other characteristics of an average employee such as wage, gender, age, race, and education. This finding is also robust after controlling for the degree of managerial job risk-aversion (proxied by the labor income concentration of top-paid employees). The economic magnitude of the correlation is large as well. For example, a one standard deviation increase of *Focal/Personal* is associated with a 1 percentage point decline in market leverage (about 4.5% relative to its mean). For comparison, this magnitude is similar to the effect of an increase in state corporate taxes on corporate leverage, as documented by Heider and Ljungqvist (2015). Additionally, a one standard deviation increase of *Focal/Family* is associated with a 1.6 percentage point decline in market leverage (about 7.5% relative to its mean).

We further explore cross-sectional heterogeneity of the relationship between a firm's capital structure and its workers' labor income concentration in it. Consistent with the hypothesis that employees should matter more in firms that rely more on human capital (as opposed to physical

6 Of course, one may argue that relatively few employees in reality know precisely their employers' capital structure except when the latter are in financial distress. However, as pointed out by Berk, Stanton, and Zechner (2010) and shown in Brown and Matsa (2016), most employees (even prospective ones) have a general sense of how "safe" their employers are in terms of survival because they are able to obtain informative signals from financial intermediaries (such as credit rating agencies and analysts), coworkers, management, news media, and other aspects of the economy to assess the financial risk of their current and future employers.

capital), we find that the negative association between leverage and employee labor income concentration is stronger in firms with higher labor intensity. The clientele effect is also more prominent in financially distressed firms, where employees worry the most about their labor income and unemployment risk and thus pay the closest attention to their employers' debt policies. This result is consistent with the notion that distressed firms are less able to use wage premium as a tool to compensate their employees for the financial risk imposed by higher leverage (see, e.g., Perotti and Spier 1993; Chemmanur, Cheng, and Zhang 2013), and therefore need to rely more on the employees' personal labor income diversification abilities (captured by our two measures of employee job risk aversion).

Finally, we analyze whether, as modeled by Berk, Stanton, and Zechner (2010), firms with lower leverage attract more risk-averse employees (i.e., those without additional labor income from alternative jobs or family members). We find that new employees hired by a lower levered firm tend to have higher *Focal/Personal* and lower *Focal/Family* one year after joining the firm. These results suggest that employees with no other means of living choose to work for (and are selected by) firms with less risky financial policies, which is consistent with the self-reinforcing equilibrium relationship between leverage and employee risk aversion predicted by Berk, Stanton, and Zechner (2010).

It is worth noting that our main purpose is not to identify a causal effect of employee job risk attitude on firm leverage or vice versa, but to examine the equilibrium matching between the two, which itself reflects the importance of labor risk preference for corporate financial decisions. In this sense, the above two results (that firms whose workers have higher labor income concentration in them use less debt and that firms with lower leverage recruit employees with less alternative labor income) both provide support for the main hypothesis of our paper, which is a clientele effect of corporate leverage with respect to employees.

Our paper mainly makes three contributions. First, it extends the existing finance literature on labor and capital structure. Specifically, several empirical studies shed light on the relation between employee job risk aversion and the use of debt. However, due to the difficulty of measuring employee job risk aversion, these analyses either rely on industry-level data (Titman and Wessels 1988) and survey data (Brown and Matsa 2013), or exploit an across-the-board shock to employee risk preference, such as state-level changes in unemployment insurance (Agrawal and Matsa 2013). In contrast, we extend this literature by directly measuring employees' job risk aversion in the cross section and testing its equilibrium matching with a firm's capital structure (i.e., the clientele effect). Using the unique employee job-level income data to measure firm-level employee job risk aversion, we provide novel evidence of an employee clientele effect of corporate leverage, as predicted by existing theories.

Second, while previous studies neglect employees' ability to personally diversify their labor income risk and mostly focus on firm-level risk management practices or country/state-level regulations regarding employment risk, our paper finds that employees' *personal* diversification of labor income risk plays an important role in corporate finance. Moreover, while a large strand of literature suggests that managerial style and preferences can have a considerable impact on corporate policies (e.g., Graham and Narasimhan 2004; Schoar 2007; Malmendier and Tate 2005; Malmendier et al. 2011; Malmendier and Nagel 2011), our paper shows that the effects of employee personal labor income diversification persist after we control for managerial risk attitudes. These findings indicate that the preference of *rank-and-file employees* can also significantly influence corporate financial policies such as capital structure decisions, suggesting a non-trivial interaction between labor market frictions (which affect ordinary employees' personal and family employment situations) and capital market dynamics (which are shaped by aggregate corporate decisions).

Third, our paper also proposes a new way that firms with higher leverage can deal with their workforce: they can hire more risk tolerant employees instead of paying the extra wage premium to compensate for the labor unemployment risk, which has been identified by the existing empirical literature as the predominant source of indirect bankruptcy costs that contribute to the well-documented phenomenon of "underleveraging" (e.g., Graham and Tucker 2006).[7]

The rest of the paper is organized as follows. Section 2 discusses the related literature. Section 3 describes sample selection and reports summary statistics. Section 4 presents the baseline results. Section 5 performs cross-sectional analysis. Section 6 reports the analysis of new hires. Section 7 concludes the paper.

2. RELATION TO THE EXISTING LITERATURE

Our paper is related to the empirical literature on labor and capital structure. Titman and Wessels (1988), using a sample of manufacturing firms in the U.S. between 1974 and 1982, find that firms with more specialized labor have lower leverage. To the extent that employees with more specialized human capital investment in a firm care more about their jobs (i.e., are more risk averse), their results are consistent with ours. However, they use an industry-level measure, the percentage of an industry's workforce that voluntarily left their jobs, to proxy for labor specialization, and thus cannot capture the firm-level heterogeneity in employee job risk aversion.

Exploiting changes in state-level unemployment insurance laws as an exogenous shock, Agrawal and Matsa (2013) find that employees' exposure to labor unemployment risk has a causal impact on corporate financial policies such as leverage. While their findings provide novel evidence

[7] Of course, there might be a cost of hiring risk tolerant employees as well because these workers, i.e., those with multiple other jobs or with working spouses, may be too busy to focus on their primary jobs and thus provide lower-quality services to their current employers than risk averse employees do. In this sense, the lower productivity of risk tolerant employees might be another form of indirect bankruptcy costs that highly-levered firms need to pay, although our empirical finding of an employee clientele effect indicates that such implicit costs should on average be smaller than the wage premium paid to an average employee.

that changes in a firm's employee risk aversion can impact its use of debt, they do not directly measure the heterogeneity in employee risk preference across different firms and thus do not test the equilibrium matching between firm leverage and employee risk aversion as predicted by prior theoretical studies.

Several related studies examine the effect of leverage on CEO and employee pay, but arrive at different conclusions. Chemmanur, Cheng, and Zhang (2013) analyze whether human capital costs are an important determinant of capital structure and find that leverage is positively related to CEO compensation and average employee pay. However, since they obtain data on average employee pay from Compustat, which is missing for over 90% of its companies, their finding of a positive relation between leverage and average employee pay is inconclusive. In fact, using a larger and hand-collected sample of average employee pay and structural estimation techniques, Michaels, Page, and Whited (2016) find that wages and leverage are negatively related, both cross-sectionally and within firms. Dore and Zarutskie (2016) find that, following an increase in firm leverage, workers with higher ex ante unemployment costs experience higher wage growth relative to workers at the same firm with lower such costs. Like most of the previous empirical literature, none of the above studies explore the heterogeneity in employee risk attitudes across firms with different capital structure but rather show how leverage affects executive or average employee pay either through an ex-ante compensation channel or through an ex-post bargaining channel. In contrast, our paper shows that different firms can adjust the composition of their labor force in addition to changing their wage/compensation policies to match their financial structures.

Our paper also contributes to the large literature examining the relation between various aspects of labor market frictions and capital structure. For example, Bae, Kang, and Wang (2011) find that firms with high employee friendly ratings maintain low debt ratios. Exploiting variations in employment protection across different countries, Simintzi, Vig, and Volpin (2014) find that

increases in employment protection increase operating leverage and thus reduce financial leverage. Kim (2015) finds that a new plant opening leads to higher leverage of existing firms in the affected county, and Serfling (2015) finds that firms reduce debt ratios following the adoption of state-level labor protection laws. Using data from Sweden, Baghai, Silva, Thell, and Vig (2016) find that firms lose their most skilled workers as they approach financial distress. However, none of them studies the employee clientele of capital structure as we do. Further, these studies either exploit the country/state-level variation in regulations regarding employees or examine firm-level decisions to manage human costs of bankruptcy, whereas our paper explores the implication of employee *personal* labor income diversification for corporate financial policies such as leverage.

Finally, our paper is broadly related to the literature that studies the role played by labor in a wide spectrum of corporate activities, such as mergers and acquisitions (John, Knyazeva, and Knyazeva 2015; Tate and Yang 2016; Ouimet and Zarutskie 2016), CEO compensation (Ellul, Wang, and Zhang 2016), corporate governance (Atanassov and Kim 2009), payout policy (He, Tian, and Yang 2016), technological innovation (Acharya, Baghai, and Subramanian 2013, 2014; Bradley, Kim, and Tian 2016), investment in workplace safety (Cohn and Wardlaw 2016), plant closures (Tate and Yang 2015a), corporate diversification (Tate and Yang 2015b), and entrepreneurship (Ouimet and Zarutskie 2014).

3. DATA, SAMPLE SELECTION, AND SUMMARY STATISTICS

3.1 Data and Sample Selection

We combine data on the job history of individual employees as well as their family members with data on their employers using two unique datasets maintained by the U.S. Census Bureau. The individual worker-level data is from the Longitudinal Employer-Household Dynamics (LEHD) program, which consists of worker-specific earnings records that employers submit to the

unemployment insurance (UI) office of their state each quarter. These quarterly earnings records, contained in the Employment History File (EHF), are submitted to the LEHD program along with establishment-level datasets collected as part of the Quarterly Census of Employment and Wages (QCEW), which provides information about the employers themselves. Moreover, the Individual Characteristics File (ICF) provides data on worker gender, age, race, and education. Overall, the LEHD data covers over 95% of the employment in the private (i.e. non-government) sector.[8] However, not all states that participate in the LEHD program (under the so-called Local Employment Dynamics federal-state partnership) agree to share their data with external (i.e., non-Census) researchers. As a result, our LEHD data covers 19 states of the United States, which is comparable to the number of states available to other external researchers.[9]

The second Census dataset we use is the Longitudinal Business Database (LBD), which reports the name, address, number of employees, and total payroll for each business establishment in the U.S. as well as the identifier of the firm to which this establishment belongs at an annual frequency. To link the LBD firms to Compustat records, we update the current Compustat-SSEL bridge file provided by the Census, which ends in 2005, to the year 2011. We also improve upon the matching methodology of the bridge file by using "GVKEY" rather than "CUSIP" as a unique identifier for Compustat records and by matching the LBD firms to Compustat by year, name, and historical EIN (extracted from firms' 10-K filings). We then use the Business Register Bridge (BRB), another internal link file provided by the Census, to match the LBD establishment micro data to the LEHD by EIN, state, and county.

After linking the two Census datasets (LEHD and LBD) to Compustat, we drop heavily regulated industries, i.e., financial firms (SIC codes between 6000 and 6999) and utilities (SIC codes between 4900 and 4999). We also restrict the sample to employees between the age of 25 and 64 and

[8] For a full description of the LEHD data, see Abowd et al. (2009).
[9] For example, Dore and Zaruskie (2016) have access to 25 LEHD states.

those with fewer than five jobs in one year.[10] In addition, since corporate leverage is a firm-level financial decision (rather than an establishment-level decision), we need to ensure that the majority of our sample firms' employees are covered by the LEHD data that we have access to. Specifically, for a firm to be included into our final sample, we require that at least 90 percent of its workforce (measured either by the number of employees or by total payroll in LBD) is covered by its plants/establishments in the 19 states for which we have LEHD data.[11]

Our financial statement information and accounting data come from Compustat. Our final sample includes about 6,000 firm-years, or approximately 1,400 unique firms between 1990 and 2008.[12] The focal firm income to family income ratio (*Focal/Family)* is only available from 1999 onwards because the household identification information, which largely comes from the 1040 tax return data, is unavailable before that year.

3.2 Measuring Employee Labor Income Concentration and Financial Leverage

In order to construct our two measures of employee labor income concentration, we first aggregate a person's quarterly income in LEHD from each job over the four quarters in a year, and then sum up her earnings across all the jobs to obtain her total annual labor income. In the same vein, we also calculate a person's annual household labor income as the sum of the quarterly labor income of her and other household members over the year. Next, to calculate the *Focal/Personal* measure for firm *i* in year *t*, we calculate, for each employee of firm *i*, the fraction of her annual labor income that comes from firm *i* in year *t*, and average across all employees of firm *i*. Similarly,

[10] Employees with age below 25 or above 64 are likely to be part-time workers. Similarly, data on employees with more than five jobs in one year are likely to be caused by the wrong assignment of EINs to immigrants in state employment records.

[11] Our results remain qualitatively similar if we require a firm to have 100% or 80% of its workforce covered by the LEHD data that we have access to.

[12] The numbers of observations for our sample (e.g., the number of unique firms, number of firm-years, and the number of observations in our regressions) are all rounded according to the disclosure requirements of the U.S. Census Bureau. For example, we round a number to the nearest hundred if it is between 1,000 and 10,000.

to calculate the *Focal/Family* measure for firm *i* in year *t*, we calculate for each employee of firm *i* the fraction of her household labor income that comes from firm *i* in year *t*, and average across all employees of firm *i*. Higher values of these two measures indicate higher employee job risk aversion because everything else equal, employees whose personal income solely depends on one job or whose family members do not work will not want their employers to take excessive financial risk via higher leverage, whereas employees with additional labor income either from themselves or their family members may be more tolerant to risky financial strategies by their employers.[13]

Following the literature, we examine two widely adopted measures for corporate financial leverage. The first one is market leverage (*MktLev*), which is calculated as a firm's total debt (the sum of current liabilities and long-term debt) divided by the sum of its total debt and the market value of its equity. The second one is book leverage, which is calculated as a firm's total debt divided by its total assets (*BookLev*). The Appendix provides a detailed description of these main variables.

3.3 Measuring Control Variables

We control for a vector of variables commonly found in studies on capital structure (e.g., Rajan and Zingales (1995), Lemmon, Roberts, and Zender (2008)), which include firm size (the natural logarithm of total assets, *LnAsset*), growth opportunities (Tobin's Q, *TobinQ*), return on total assets (*ROA*), the natural logarithm of firm age (the number of years listed in Compustat, *LnAge*), and asset tangibility (net property, plant, and equipment scaled by total assets, *PPEAsset*). Following recent work on financial leverage (e.g., Matsa 2010; Agrawal and Matsa 2013), we also include the

[13] Since there is a large literature on managerial risk preference and corporate decisions, we exclude top-five managers (top-five highest paid employees) when constructing the employee labor income concentration measures to distinguish between the risk preferences of rank-and-file employees and those of top executives. We control for managerial labor income concentration in the subsequent analysis.

modified Altman's Z score (*AltmanZscore*) to control for a firm's probability of bankruptcy.[14] Last, to better control for employee characteristics that might potentially affect both job risk aversion and leverage, we further include in our regressions the average wage (*Wage*), the fraction of male employees (*MaleRatio*), the natural logarithm of average employee age (*LnEmpAge*), the average years of education an employee receives (*Education*), and race (the fraction of White employees, *WhiteRatio*).[15] The Appendix provides the details on how we construct these control variables.

3.4 Summary Statistics

To ensure that outliers do not drive our results, all the continuous variables are winsorized at the 1st and 99th percentiles. Book leverage is winsorized at the 5th and 95th percentiles because of a larger number of extreme outliers. Table 1 Panel A reports the summary statistics and sample distribution. In terms of employee job risk aversion, *Focal/Personal* has a mean of 83.2 percent, and *Focal/Family* has a smaller mean of 57.9 percent, suggesting that income from the sample firms accounts for the majority of their employees' total personal labor income and total family labor income. While the average market leverage for sample firms is 22.5 percent, the average of book leverage is 20.1 percent. On average, firms have book assets of $55.0 million, Tobin's Q of 2.8, age of 9.8 years, ROA of -0.121, and PPE to assets ratio of 21.2 percent. In terms of employee characteristics, the mean wage is $60,500 and on average about 52.6% of the sample firms'

[14] The modified Altman's z-score is calculated as 1.2×(working capital/assets)+1.4× (retained earnings/assets)+3.3× (earnings before interests and taxes/assets)+(sales/assets). Since this variable is missing for a considerable fraction of our sample firm-years, which limits our test power, we replace its missing values with 100 (higher than the maximum z-score) and create a new dummy variable that equals one if the modified Altman's Z-score is missing. We include both the replaced variable and the new dummy variable in our regressions but do not report the estimated coefficients for the later in the tables.

[15] Previous psychology literature has argued that gender and age might affect a person's risk attitude. Moreover, wage and education may be highly correlated with a worker's outside job opportunities, which in turn affect our empirical measures of employee job risk aversion. That is why we control for these employee characteristics in our multivariate analysis. Lastly, we also control for an employee's race to account for the fact that different cultural heritages may give rise to different work ethics, habits, and within-household labor distribution.

employees are male. The employees receive an average education of 14.0 years and about 76.4% of them are white.

For comparison with the Compustat universe, we calculate the same firm-level characteristics for U.S. firms in Compustat (after excluding financials and utilities). During our sample period of 1990-2008, an average U.S. firm in Compustat has market leverage of 18.4 percent, book leverage of 18.7 percent, book assets of $102.4 million, Q of 3.3, age of 7.6 years, ROA of -0.105, and PPE to assets ratio of 26.6 percent. Therefore, compared to the Compustat universe, our sample firms have smaller asset base, slightly higher leverage ratios, and are about two years older. They have broadly similar Tobin's *Q*, ROA, and PPE to assets ratio as an average firm in the Compustat universe.

Panel B of Table 1 presents the distribution of our sample firms across their headquarter states. Note that a firm's headquarter state does not necessarily overlap with the states for which we have LEHD data. For example, a firm headquartered in New York (a state for which we have no access to LEHD data) may have over 90% of its work force or payroll in Georgia (for which we have LEHD data). As pointed out by Heider and Ljungqvist (2015), the state information in Compustat reflects a firm's current headquarter and therefore could be inaccurate for earlier years if the firm relocated. We make adjustments to the Compustat headquarter state data to address this issue.[16] As can be seen, the state distribution of our sample is dispersed, with New Jersey, Illinois, Washington, Maryland, and Wisconsin accounting for the highest proportion of the sample. Panel C of Table 1 presents the distribution of our sample firms across Fama-French 12 industries, which is also quite dispersed, without a single industry dominating the sample distribution. Business Equipment and Health Care are the two industries that account for the largest proportion of our sample.

[16] We thank Professor Alexander Ljungqvist for sharing the updated headquarter state data.

4. BASELINE EMPIRICAL ANALYSIS

4.1 Contemporaneous relation between financial leverage and employee job risk aversion

To test the clientele effect of corporate leverage with respect to employees, we examine various forms of the following multivariate ordinary least squares (OLS) models:

$$Leverage_{i,t} = a + \beta EmpRiskAversion_{i,t} + \gamma X_{i,t} + \lambda Y_{i,t} + Firm_i + Year_t + \varepsilon_{i,t}, \quad (1)$$

The dependent variable, *Leverage*, is either market leverage or book leverage of firm *i* in year *t*. The key independent variable, *EmpRiskAversion*, is one of the two employee labor income concentration measures, *Focal/Personal* and *Focal/Family*. $X_{i,t}$ is a vector of time-varying firm characteristics that may affect a firm's leverage and $Y_{i,t}$ is a vector of control variables for employee characteristics. We also include firm and year fixed effects to control for time-invariant firm characteristics and common time trends, respectively. The heteroskedasticity-robust standard errors are clustered at the firm level.

Table 2 provides the baseline OLS results for the contemporaneous correlation between a firm's financial leverage and its employees' labor income concentration in it. Panel A examines the labor income concentration measure based on total personal labor income (*Focal/Personal*), and panel B reports results for the measure based on total family labor income (*Focal/Family*). In Panel A, Models (1) to (3) report the regressions of book leverage and Models (4) to (6) report the regressions of market leverage. We start from a parsimonious specification (without any control variables other than firm and year fixed effects), then include firm-level control variables, and finally include controls for average employee characteristics.[17] The coefficient estimates in all six model specifications are negative and significant, suggesting that employee job risk aversion has a negative

[17] For robustness test, we also repeat Models (1) and (4) (univariate regressions) without including fixed effects, and the results are similar.

association with firms' leverage, consistent with our hypothesis that employees with less alternative personal labor income are more averse to higher financial risk induced by debt usage. As to economic magnitude, the coefficient estimate of *Focal/Personal* in Model (6) indicates that a one standard deviation increase of employees' average focal firm income to personal income ratio is associated with a 1 percentage point (=0.087*0.115*100%) lower contemporaneous market leverage, or a decline in market leverage by 4.5% (relative to its mean). This magnitude is similar to the effect of an increase in state corporate taxes on corporate leverage, as documented by Heider and Ljungqvist (2015).

In terms of other control variables, firms with higher asset tangibility (i.e. larger *PPEAsset*) and lower probability of bankruptcy (*AltmanZscore*) are more likely to have higher leverage, which is consistent with common economic intuition. We also find some (albeit weak) evidence that larger and older firms with fewer growth opportunities use more debt in their capital structure.

Regarding employee characteristics, we have some (modest) evidence that firms with more male employees and white workers tend to use more debt in their capital structure. However, we find a significantly negative relationship between leverage and average employee wage in both panels and all model specifications, which suggests that the ex-post bargaining effect of leverage (as argued by theories such as Perotti and Spier (1993) and confirmed by recent empirical evidence such as Michaels, Page, and Whited (2016)) seems to dominate the ex-ante compensation premium effect (as argued by theories such as Berk, Stanton, and Zechner (2010) and confirmed by papers such as Chemmanur, Cheng, and Zhang (2013)) in our sample. It is worth noting that our analysis here just reveals a correlation between leverage and wage, and cannot be interpreted as a direct test for the causal effect of leverage on either the ex-ante wage to compensate for bankruptcy risk or the ex-post wage to reflect bargaining concerns. Nevertheless, our results in Table 2 indeed demonstrate that the

equilibrium matching between leverage and employee job risk aversion persists even after we control for the implication of wages for capital structure.

Panel B repeats the OLS analysis using the focal firm income to family income ratio (*Focal/Family)* as the main independent variable. The coefficients on the *Focal/Family ratio* are significantly negative in all models, consistent with employee labor income concentration negatively being associated with firm leverage. The effect is economically significant as well. For example, the coefficient of 0.126 in Model (6) (the full specification with all controls and fixed effects) indicates that a one standard deviation increase of *Focal/Family* is associated with a 1.6 percentage point (=0.126*0.127*100%) lower contemporaneous market leverage, or a decline in market leverage by 7.5% (relative to its mean).

4.2 Robustness tests

Our first robustness test includes industry-year fixed effects (in addition to other control variables and firm fixed effects) to further control for time-varying industry-specific differences in employee characteristics or the usage of debt. Industries are defined by two-digit SICs. Panels A and B of Table 3 repeat the baseline regressions in Table 2 with the additional industry-year fixed effects. As can be seen, the coefficients on both *Focal/Personal* and *Focal/Family* remain significantly negative, with similar magnitudes to those in Table 2. For example, the coefficient on *Focal/Personal* in Model (4) of Panel A (the fullest model specification using market leverage as the dependent variable) is -0.109 (with a t-stat of -2.83), which is slightly larger than the coefficient in Model (6) of Table2, Panel A, -0.087 (with a t-stat of -2.47). These results suggest that our baseline finding is not likely to be driven by unobservable time-varying industry-specific factors.[18]

[18] In untabulated analysis, we also conduct robust tests by dropping firms with zero-leverage (documented by Strebulaev and Yang, 2013) to address the concern that such firms may introduce a nonlinear relation between leverage and our

Our second robustness test examines the lead-lag relationship between leverage and employee labor income concentration. Since previous theoretical studies suggest that employee job risk aversion has a causal impact on firm leverage, we examine whether predetermined levels of employee job risk aversion empirically predict the use of debt in capital structure. Table 4 presents regressions similar to the baseline regressions in Table 2 but with one-year lagged measures of employee risk aversion as well as other control variables. The results show that coefficients on *Focal/Personal* and *Focal/Family* continue to be significantly negative, with magnitudes similar to those in the contemporaneous regressions in Table 2. For example, the coefficient on *Focal/Personal* in Model (4) of Panel A (the fullest model specification using market leverage as the dependent variable) is -0.112 (with a t-stat of -2.88), which is slightly larger than the coefficient in Model (6) of Table2, Panel A, -0.087 (with a t-stat of -2.47). These results provide suggestive evidence that workers' labor income concentration in their current employers also negatively predicts the latter's corporate leverage.

Third, a large body of previous literature suggests that CEO characteristics and risk preferences might significantly affect a firm's risk taking and financial policies including leverage. For example, overconfident CEOs have been shown to exhibit greater investment-to-cash-flow sensitivity (Malmendier and Tate 2005), make more aggressive acquisition decisions (Malmendier and Tate 2008), and use more debt (Malmendier, et al. 2011). Similarly, personal experiences of CEOs have been found to have important implications for the corporate decisions they made (e.g., Graham and Narasimhan 2004; Schoar 2007; Malmendier et al. 2011; Malmendier and Nagel 2011).[19]

Hence, to explore further whether our baseline results are driven mainly by the risk attitudes of CEOs and top executives or by those of average employees, we control for the labor income

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independent variables. We find that the coefficients on the job risk aversion measures remain significant and even become slightly larger in magnitude.

[19] Other relevant papers include Bertrand and Schoar (2003), Cronqvist et al. (2011), Donaldson (1990), Becker (2006), Goel and Thakor (2008), Hackbarth (2008), and Xuan (2009).

concentration of top firm managers in our regressions. Specifically, we construct the income concentration measures for firm managers (i.e., the top five highest paid employees in a firm) following the same method discussed earlier, and include them as additional control variables in Equation (1).

Table 5 presents the results. In Panel A, we first examine the management *Focal/Personal* alone (i.e., without average employee *Focal/Personal*) in Models (1) and (3). As can be seen, the coefficients on the management *Focal/Personal* are negative but statistically insignificant. This lack of significance is probably due to the fact that top executives in a firm are already fully occupied with their jobs so that they do not have enough extra time or energy left for alternative employment opportunities. In untabulated analysis, we confirm this conjecture by examining the empirical distribution of the management *Focal/Personal* ratio: both its mean and median are above 95%, with a very small standard deviation.

When we include both management *Focal/Personal* and average employee *Focal/Personal* in the same regressions (as in Models (2) and (4)), the average employee *Focal/Personal* is significantly negative while the management *Focal/Personal* remains insignificant. This evidence again indicates that the lack of variation in the management *Focal/Personal* ratio reduces its explanatory power for corporate leverage, suggesting that our main results are unlikely to be driven by managerial job risk attitudes.

Panel B repeats the analysis for *Focal/Family* as the job risk aversion measure and the results are broadly similar: corporate leverage has a significantly negative correlation with employee job risk aversion but its association with the management *Focal/Family* ratio is statistically insignificant. Since the majority of the top executives are already highly paid, their household members (especially their spouses) do not need to work, which leads to a clustering of the management *Focal/Family* ratio around 90% with little variation.

Taken together, these results suggest that the association between employee job risk aversion and firm leverage is robust after controlling for management risk attitude.

5 CROSS-SECTIONAL ANALYSES

In this section, we explore cross-sectional heterogeneity in the relationship between capital structure and employee job risk aversion to provide further support for our main hypothesis.

5.1 Cross-Sectional Heterogeneity in Labor Intensity

Firms that use more human capital (rather than physical capital) in their operations would naturally care more about their employees' preferences and risk attitudes when making financial decisions, not only because employees now have greater bargaining power against management and shareholders but also because their wages, which both affect and are affected by firm financial policies, now comprise a larger portion of such firms' operating costs. Hence, we expect a stronger clientele effect of corporate leverage regarding employee job risk aversion for more labor intensive firms.

To test this conjecture, we create two proxies for labor intensity as suggested by Dewenter and Malatesta (2001): the number of employees over assets (*EmpAssets*) and the number of employees over sales (*EmpSales*). We first divide our sample into two groups based on whether a firm's labor intensity measure is below or above the sample median, and then run OLS regressions as in Equation (1) using these two subsamples. Since the two labor intensity measures are highly correlated, we present results using *EmpAssets* for brevity, and results using *EmpSales* are very similar. Table 6 shows that the negative correlation between corporate leverage and employee job risk aversion concentrates mostly in firms with higher labor intensity. Specifically, the coefficient estimates for both employee labor income concentration measures for high labor intensity firms are

twice or three times as large as those for low labor intensity firms. Additionally, the coefficients for the employee labor income concentration measures are statistically significant only in the firms with high labor intensity but not in the firms with low labor intensity. Taken together, these results are consistent with the employee clientele effect of leverage as suggested by theoretical studies such as Berk, Stanton, and Zechner (2010).[20]

5.2 Cross-Sectional Heterogeneity in Financial Distress

Employees are more likely to pay attention to their employer's capital structure when the firm is closer to financial distress because their labor income is more likely to suffer while their unemployment risk looms to a greater extent. As a result, to prevent talented workers from "jumping the sinking ship", the distressed firm has to cater its financial policy more to its employees' risk attitudes. In addition, highly levered firms, when in distress, are also less able to pay higher salaries to compensate their risk averse employees for potential bankruptcy risk, which makes reducing debt a more desirable strategy than keeping the high leverage while offering wage premium to their employees. Therefore, the negative correlation between corporate leverage and employee job risk aversion should be more pronounced for firms that are more financially distressed.

To test this conjecture, we construct two subsamples based on a firm's Altman's Z-score, a widely used measure to predict bankruptcy, first proposed by Altman (1968) and modified by recent studies on financial leverage (e.g., Matsa 2010; Agrawal and Matsa 2013).[21] We divide our sample of firms into two groups based on their Z-scores. Following the standard practice in the literature, we classify firms with Z-scores smaller than 1.81 as financially distressed ones and those with Z-scores

[20] In untabulated analysis, we also compare the employee clientele effect of leverage for firms operating in industries with differential union power. We find that there is a negative and significant correlation between firm leverage and employee job risk aversion for firms in industries with a high unionization rate but this relationship becomes smaller and statistically insignificant for firms in industries with weaker union power.

[21] We follow the literature and use the full-version of Z-Score instead of the modified Z-Score to split the sample. Modified Z-Score, which excludes the leverage component, is used as a control variable in our leverage regressions.

above 2.99 as not financially distressed. Then we re-estimate the OLS regressions as in Equation (1) separately for these two subsamples. The results are presented in Table 7. Consistent with the conjecture that the employee clientele effect of corporate leverage would be stronger for financially distressed firms, we find a much stronger negative correlation between debt usage and our measures of employee risk aversion in the subsample of firms with smaller Z-scores. While the coefficients for the risk aversion measures are significant in both subsamples, those in the low Z-score subsample are generally three times as large as those in the high Z-score subsample.

Overall, the results in this section indicate that the employee clientele effect of leverage is more pronounced in firms with higher labor intensity and those in more distressed financial situation, consistent with our main theme that employee job risk attitudes matter for capital structure decisions.

6. Analysis of New Hires

Berk, Stanton, and Zechner (2010) proposes a self-reinforcing dynamic relationship between employee risk aversion and firm leverage where risk-averse employees push for lower leverage, and in the meantime firms with lower leverage attract more risk averse employees. In order to study whether lower leverage firms attract more risk averse employees, we run the following model:

$$NewHireEmpRiskAversion_{i,t+1} = a + \beta\, Leverage_{i,t} + \gamma X_{i,t} + \lambda Y_{i,t} + \delta Z_{i,t+1} + Firm_i + Year_t + \varepsilon_{i,t}, \quad (2)$$

The dependent variable in this model is *NewHireEmpRiskAversion,* which is similarly defined as *EmpRiskAversion* in the previous sections but uses the sample of newly hired employees. We define an employee to be a new hire in year *t* if she receives labor income from firm *i* in year *t* but not in year *t-1*. Furthermore, to ensure that this employee is not a part-time or seasonal worker, we

also require that she must receive wages from firm *i* in all four quarters in year *t+1*. Again, we control for a wide spectrum of time-varying firm characteristics $X_{i,t}$, average employee characteristics $Y_{i,t}$, as well as firm and year fixed effects. To better control for the characteristics of the new hires themselves (not those of the existing workforce, $Y_{i,t}$), we further include in Equation (2) $Z_{i,t+1}$, the various employee characteristics (i.e., age, education, race, and gender) only for new hires, which are constructed at year *t+1*. We correct estimated standard errors in all regressions for heteroskedasticity and within-firm clustering.[22]

Table 8 presents the results from estimating Equation (2). Panel A presents the regressions of *Newhire Focal/Personal*, which is constructed by averaging the *Focal/Personal* ratio for newly hired employees. The coefficients on the lagged *Leverage* measures are all significantly negative, suggesting that firms with a lower existing level of leverage hire more risk-averse new employees. Panel B repeats the analysis using *Focal/Family* for newly hired employees, and the coefficients on the lagged leverage measures are also significantly negative. Overall, the results in Table 8 provide supporting evidence of the self-reinforcing process modeled in Berk, Stanton, and Zechner (2010).

7. CONCLUSION

The theoretical study of Berk, Stanton, and Zechner (2010) predicts a "clientele effect" of corporate leverage with respect to employees. In their model, firms with higher employee job risk aversion tend to use less debt, and those with lower leverage hire more risk-averse employees, leading to an equilibrium matching between a firm's employee job risk aversion and its corporate leverage. Our paper directly tests this clientele effect using the Longitudinal Employer-Household

[22] For this test, we drop the data requirement that a firm needs to have at least 90% of its employment or payroll covered by the 19 states for which we have LEHD data because our model specification (with firm fixed effects) still allows us to fully capture the within-firm variation in the characteristics of new employees hired from a given LEHD state even if the majority of the firm' economic activities are outside of the 19 LEHD states. Imposing the above data requirement does not change our results qualitatively but reduces the power of our test and thus the statistical significances of the results.

Dynamics (LEHD) data from the Census Bureau. Consistent with the clientele effect, we find that a firm uses less debt in its capital structure when its employees are more risk averse towards their jobs due to higher labor income concentration, i.e., when a larger fraction of the employees' total personal labor income or total family labor income is accounted for by their labor income from this particular firm. Our results continue to hold after we control for firm fixed effects, other employee characteristics such as wages, gender, age, and education, and the risk preference of managers. Further, the matching between leverage and employee job risk aversion is more pronounced for firms with higher labor intensity and those in financial distress. Additionally, firms with a lower existing level of leverage recruit more risk-averse employees in terms of new hires.

Our paper contributes to the existing finance literature on labor and capital structure by directly measuring employees' job risk aversion in the cross section and testing its equilibrium matching with a firm's capital structure (i.e., the clientele effect). By exploiting the variation in personal labor income diversification decisions, we provide novel evidence of an employee clientele effect of corporate leverage, as predicted by existing theories. While a large body of empirical literature argues that managerial style and preferences can have a large impact on corporate decisions, our results show that the preference of rank-and-file employees can considerably influence corporate financial policies. Overall, our paper suggests that firms' financial decisions both influence the composition of their workforce and are shaped by the personal employment diversification activities of their employees, highlighting the important role played by labor market frictions in influencing capital market dynamics (Zingales 2000).

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Appendix: Definition of variables

Variable	Definition
Focal/Personal	The ratio of focal income to total personal income. For a firm-year, we first calculate for each employee the ratio of her annual labor income from the firm to her total annual labor income, and then average across all employees of the firm.
Focal/Family	The ratio of focal income to total family income. For a firm-year, we first calculate for each employee the ratio of her annual labor income from the firm to her total family annual labor income, and then average across all employees of the firm.
NewHire Focal/Personal	Similarly defined as Focal/Personal but using newly hired employees. An employee is identified as a new hire if she is not on the payroll in year *t-1* but on the payroll in year *t* and receives wages from the firm in each quarter of year *t+1*.
NewHire Focal/Family	Similarly defined as Focal/Family but using newly hired employees. An employee is identified as a new hire if she is not on the payroll in year *t-1* but on the payroll in year *t* and receives wages from the firm in each quarter of year *t+1*.
BookLev	Firm *i*'s book leverage ratio, defined as book value of long-term debt (DLTT) divided by book value of total assets (AT).
MktLev	Firm *i*'s market leverage ratio, defined as book value of long-term debt (DLTT) divided by the sum of total debt (DLTT) and market value of equity (PRCC_F×CSHO).
LnAsset	The natural logarithm book value of firm *i*'s total assets (AT, in billions).
ROA	Return on assets defined as operating income before depreciation (OIBDP) divided by book value of total assets (AT).
PPEAsset	Property, plant & equipment (PPENT) divided by book value of assets (AT).
TobinQ	Firm *i*'s Tobin's *Q*, defined as market value of equity (PRCC_F×CSHO) plus book value of assets (AT) minus book value of equity (CEQ) minus deferred taxes (TXDB) (set to zero if missing) divided by book value of assets.
AltmanZscore (Modified)	The modified Altman's z-score, calculated as 1.2×(working capital/ assets) + 1.4×(retained earnings/assets+3.3×(earnings before interests and taxes/assets)+(sales/assets).
AltmanZscore	The full Altman's z-score, calculated as 1.2×(working capital/ assets) + 1.4×(retained earnings/assets))+0.6×(market value of equity/book value of total liabilities)+3.3×(earnings before interests and taxes/assets)+(sales/assets).
LnAge	The natural logarithm of firm *i*' age. Age is approximated by the number of years listed on Compustat.
Education	The natural logarithm of one plus the average years of education an employee receives.
WhiteRatio	The percentage of white employees in firm *i*.
Wage	Average annual wage (in thousands) for employees of firm *i*.

LnEmpAge	The natural logarithm of one plus the average employees' age in firm *i*.
*Male*Ratio	The percentage of male employees in firm *i*.
Emp/AT	The number of employee divided by book value of total assets (AT).

Table 1: Summary Statistics and Sample Distributions

Panel A reports the summary statistics for variables constructed based on the sample of U.S. listed firms that are covered by the Longitudinal Employer-Household Dynamics (LEHD) program from 1990 to 2008. Definitions of variables are in the Appendix. Panel B reports the distribution of sample firm-years across headquarter states, where "other" combines 20 states with the smallest number of firm-years. Panel C reports the distribution of sample firm-years across Fama-French 12 industries, where "missing SICs" indicates missing historical SIC information from Compustat. In Panels B and C, the numbers are rounded according to the disclosure requirements of the U.S. Census Bureau.

Panel A: Summary Statistics

Variable	**Mean**	**S.D.**	**Firm-Years**
Focal/Personal	0.832	0.115	6,000
Focal/Family	0.579	0.127	4,100
BookLev	0.201	0.233	6,000
MktLev	0.225	0.258	6,000
LnAsset	4.007	1.992	6,000
ROA	-0.121	0.588	6,000
PPEAsset	0.212	0.220	6,000
TobinQ	2.772	3.879	6,000
LnAge	2.278	0.792	6,000
Education	13.970	0.728	6,000
WhiteRatio	0.764	16.930	6,000
Wage	60.050	41.250	6,000
LnEmpAge	3.694	0.096	6,000
LnMaleRatio	0.526	0.222	6,000

Panel B: Distribution across Headquarter States

States	**# Firm-years**	***States***	**# Firm-years**
NJ	1000	TN	100
IL	800	HI	90
WA	750	CA	70
MD	500	IA	70
WI	400	RI	70
GA	350	ME	60
UT	250	TX	50
IN	200	AR	40
NV	200	FL	30

States	# Firm-years	*States*	# Firm-years
LA	150	VA	30
NY	100	CO	20
OK	100	PA	20
SC	100	Other	250

Panel C: Distribution across Fama-French 12 Industries

Industry	#Firm-Years
Consumer Nondurables	350
Consumer Durables	150
Manufacturing	550
Energy	100
Chemicals	200
Business Equipment	1400
Telephone and Television Transmission	90
Wholesales	450
Healthcare	1100
Other	750
Missing SICs	800

Table 2: Baseline Regression of Firm Leverage on Employee Job Risk Aversion

This table reports the OLS regression results of firm leverage on employee job risk aversion measures. Definitions of the variables are in the Appendix. Panel A reports regressions on *Focal/Personal*, the proportion of an employee's personal income that is accounted for by her income from the focal firm. Panel B reports regressions on *Focal/Family*, the proportion of an employee's family income that is accounted for by her income from the focal firm. Each regression includes firm fixed effects and year fixed effects. Standard errors are corrected for heteroskedasticity and within-firm clustering. To ease reading, the coefficients on *Wage* and *MaleRatio* are multiplied by 1,000 and 100, respectively. We report t-statistics in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A: Regression of Firm leverage on *Focal/Personal*

Dep. Var.	***BookLev***			***MktLev***		
	(1)	(2)	(3)	(4)	(5)	(6)
Focal/Personal$_t$	-0.093*	-0.082*	-0.091**	-0.110**	-0.071**	-0.087**
	(-1.95)	(-1.86)	(-2.23)	(2.05)	(-2.02)	(-2.47)
LnAsset$_t$		0.014	0.018		0.011	0.016*
		(1.25)	(1.55)		(1.22)	(1.78)
ROA$_t$		-0.035	-0.035		-0.015	-0.015
		(-1.50)	(-1.54)		(-0.84)	(-0.86)
PPEAsset$_t$		0.249***	0.243***		0.235***	0.227***
		(3.81)	(3.80)		(4.40)	(4.41)
TobinQ$_t$		-0.001	0.000		-0.009***	-0.008***
		(-0.62)	(0.22)		(-6.47)	(-5.83)
AltmanZscore$_t$		-0.004***	-0.004***		-0.003***	-0.003***
		(-2.60)	(-2.62)		(-2.68)	(-2.74)
LnAge$_t$		0.049***	0.044**		0.054***	0.053***
		(2.70)	(2.48)		(3.17)	(3.18)
Education$_t$			-0.009			0.001
			(-0.56)			(0.07)
WhiteRatio$_t$			0.065			0.158**
			(0.89)			(2.34)
Wage$_t$			-0.371**			-0.479***
			(-2.48)			(-3.78)
LnEmpAge$_t$			0.164			0.072
			(1.53)			(1.05)
MaleRatio$_t$			0.082*			0.083**
			(1.79)			(2.17)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,000	6,000	6,000	6,000	6,000	6,000
R-squared	0.714	0.746	0.748	0.775	0.793	0.796

Panel B: Regression of Firm leverage on *Focal/Family*

Dep. Var.	***BookLev***			***MktLev***		
	(1)	(2)	(3)	(4)	(5)	(6)
Focal/Family	-0.149***	-0.138**	-0.153***	-0.095**	-0.102**	-0.126***
	(-2.38)	(-2.53)	(-2.89)	(-1.83)	(-2.11)	(-2.59)
LnAsset		0.005	0.012		0.005	0.012
		(0.36)	(0.78)		(0.37)	(0.94)
ROA		-0.028	-0.030		-0.003	-0.005
		(-1.00)	(-1.08)		(-0.14)	(-0.26)
PPEAsset		0.283***	0.265***		0.287***	0.265***
		(3.48)	(3.36)		(4.26)	(4.17)
TobinQ		-0.001	0.000		-0.009***	-0.008***
		(-0.43)	(0.05)		(-5.18)	(-4.66)
AltmanZscore		-0.004**	-0.004**		-0.003**	-0.003**
		(-2.02)	(-1.98)		(-2.27)	(-2.26)
LnAge		0.042	0.042		0.039	0.042*
		(1.53)	(1.55)		(1.55)	(1.68)
Education			-0.013			-0.006
			(-0.61)			(-0.34)
WhiteRatio			0.122			0.178**
			(1.35)			(2.23)
Wage			-0.500***			-0.569***
			(-2.65)			(-3.66)
LnEmpAge			0.100			0.054
			(0.77)			(0.61)
MaleRatio			0.070			0.095**
			(1.34)			(2.06)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,100	4,100	4,100	4,100	4,100	4,100
R-squared	0.746	0.775	0.778	0.808	0.823	0.826

Table 3: Robustness Tests: Including Industry-Year Fixed Effects

This table is similar to Table 2 except that we control for industry-year fixed effects instead of year fixed effects. Industries are defined by 2-digit SICs. Definitions of the variables are in the Appendix. Panel A reports regressions on *Focal/Personal*, the proportion of an employee's personal income that is accounted for by her income from the focal firm. Panel B reports regressions on *Focal/Family*, the proportion of an employee's family income that is accounted for by her income from the focal firm. Each regression includes firm fixed effects and industry-year fixed effects. Standard errors are corrected for heteroskedasticity and within-firm clustering. To ease reading, the coefficients on *Wage* and *MaleRatio* are multiplied by 1,000 and 100, respectively. We report t-statistics in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A: Regression of Leverage on *Focal/Personal*

Dep. Var.	***BookLev***		***MktLev***	
	(1)	(2)	(3)	(4)
Focal/Personal$_t$	-0.105**	-0.111**	-0.099**	-0.109***
	(-2.14)	(-2.36)	(-2.56)	(-2.83)
LnAsset$_t$	0.019	0.022*	0.016	0.020*
	(1.49)	(1.72)	(1.56)	(1.90)
ROA$_t$	-0.042*	-0.041*	-0.017	-0.016
	(-1.79)	(-1.78)	(-0.85)	(-0.82)
PPEAsset$_t$	0.271***	0.260***	0.260***	0.249***
	(3.64)	(3.53)	(4.22)	(4.12)
TobinQ$_t$	0.000	0.000	-0.009***	-0.008***
	(0.19)	(0.19)	(-5.57)	(-5.12)
AltmanZscore$_t$	-0.004**	-0.004**	-0.003**	-0.003**
	(-2.35)	(-2.36)	(-2.45)	(-2.49)
LnAge$_t$	0.032	0.028	0.041**	0.039**
	(1.43)	(1.28)	(2.08)	(2.04)
Education$_t$		-0.007		0.000
		(-0.39)		(0.02)
WhiteRatio$_t$		0.073		0.145**
		(0.88)		(1.99)
Wage$_t$		-0.399**		-0.424***
		(-2.30)		(-3.06)
LnEmpAge$_t$		0.114		0.041
		(1.01)		(0.51)
MaleRatio$_t$		0.070		0.065
		(1.44)		(1.57)
Industry-Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	6,000	6,000	6,000	6,000
R-squared	0.786	0.788	0.834	0.835

Panel B: Regression of Leverage on *Focal/Family*

Dep. Var.	***BookLev*$_t$**		***MktLev*$_t$**	
	(1)	(2)	(3)	(4)
Focal/Family$_t$	-0.143**	-0.148**	-0.105*	-0.115**
	(-2.34)	(-2.52)	(-1.94)	(-2.15)
LnAsset$_t$	0.004	0.010	0.009	0.015
	(0.28)	(0.63)	(0.72)	(1.16)
ROA$_t$	-0.032	-0.033	-0.007	-0.007
	(-1.25)	(-1.26)	(-0.31)	(-0.32)
PPEAsset$_t$	0.300***	0.276***	0.282***	0.257***
	(3.52)	(3.31)	(3.79)	(3.60)
TobinQ$_t$	-0.001	0.000	-0.008***	-0.007***
	(-0.32)	(0.01)	(-4.47)	(-4.05)
AltmanZscore$_t$	-0.003**	-0.003**	-0.003**	-0.003**
	(-2.07)	(-2.05)	(-2.29)	(-2.29)
LnAge$_t$	0.039	0.041	0.052*	0.055*
	(1.11)	(1.16)	(1.78)	(1.92)
Education$_t$		-0.008		-0.003
		(-0.35)		(-0.16)
WhiteRatio$_t$		0.107		0.152*
		(1.07)		(1.75)
Wage$_t$		-0.540**		-0.582***
		(-2.52)		(-3.34)
LnEmpAge$_t$		0.035		0.000
		(0.24)		(0.00)
MaleRatio$_t$		0.031		0.047
		(0.62)		(1.03)
Industry-Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	4,100	4,100	4,100	4,100
R-squared	0.804	0.806	0.851	0.854

Table 4: Robustness Tests: Regression on Lagged Risk Aversion Measures

This table is similar to Table 2 except that all the independent variables are lagged one year with respect to dependent variables (leverage). Definitions of the variables are in the Appendix. Panel A reports regressions on *Focal/Personal*, the proportion of an employee's personal income that is accounted for by her income from the focal firm. Panel B reports regressions on *Focal/Family*, the proportion of an employee's family income that is accounted for by her income from the focal firm. Each regression includes firm fixed effects and year fixed effects. Standard errors are corrected for heteroskedasticity and within-firm clustering. To ease reading, the coefficients on *Wage* and *MaleRatio* are multiplied by 1,000 and 100, respectively. We report t-statistics in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A: Regression of Leverage on Lagged *Focal/Personal*

Dep. Var.	***BookLev*** $_{t+1}$		***MktLev*** $_{t+1}$	
	(1)	(2)	(3)	(4)
Focal/Personal $_t$	-0.070	-0.081*	-0.080*	-0.112***
	(-1.31)	(-1.71)	(-1.93)	(-2.88)
LnAsset $_t$		0.029**		0.042***
		(2.56)		(4.51)
ROA $_t$		-0.042*		-0.029*
		(-1.87)		(-1.90)
PPEAsset $_t$		0.159**		0.184***
		(2.43)		(3.70)
TobinQ $_t$		-0.005***		-0.005***
		(-2.82)		(-3.96)
AltmanZscore $_t$		-0.005***		-0.003***
		(-3.73)		(-3.09)
LnAge $_t$		0.045**		0.042**
		(2.57)		(2.58)
Education $_t$		-0.013		0.000
		(-0.79)		(0.02)
WhiteRatio $_t$		0.048		0.114
		(0.57)		(1.52)
Wage $_t$		-0.193		-0.311**
		(-1.23)		(-2.24)
LnEmpAge $_t$		0.173*		0.126*
		(1.75)		(1.66)
MaleRatio $_t$		0.037		0.055
		(0.90)		(1.56)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	5,600	5,600	5,600	5,600
R-squared	0.702	0.731	0.773	0.788

Panel B: Regression of Leverage on Lagged *Focal/Family*

Dep. Var.	***BookLev*** $_{t+1}$		***MktLev*** $_{t+1}$	
	(1)	(2)	(3)	(4)
Focal/Family $_t$	-0.131*	-0.147**	-0.093*	-0.137***
	(-1.92)	(-2.42)	(-1.76)	(-2.74)
LnAsset $_t$		0.030**		0.045***
		(2.21)		(3.56)
ROA $_t$		-0.027		-0.020
		(-0.93)		(-0.91)
PPEAsset $_t$		0.135*		0.171***
		(1.76)		(2.94)
TobinQ $_t$		-0.004*		-0.005***
		(-1.82)		(-2.98)
AltmanZscore $_t$		-0.005***		-0.003**
		(-3.14)		(-2.42)
LnAge $_t$		0.052**		0.042*
		(1.97)		(1.69)
Education $_t$		-0.027		-0.008
		(-1.25)		(-0.52)
*White*Ratio $_t$		0.105		0.142
		(0.97)		(1.54)
Wage $_t$		-0.322*		-0.422***
		(-1.90)		(-2.86)
LnEmpAge $_t$		0.125		0.181*
		(0.98)		(1.79)
*Male*Ratio $_t$		0.041		0.071
		(0.84)		(1.57)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	3,800	3,800	3,800	3,800
R-squared	0.728	0.751	0.796	0.809

Table 5: Robustness Tests: Control for Management Risk Aversion

This table is similar to Table 2 except that we further control for the management risk-aversion measures. *Manager Focal/Personal* and *Manager Focal/Family* are constructed similarly as *Focal/Personal* and *Focal/Family* of average employees but by using only the top five highest paid employees of a firm. Definitions of other variables are in the Appendix. Panel A reports regressions on *Focal/Personal*, the proportion of an employee's personal income that is accounted for by her income from the focal firm. Panel B reports regressions on *Focal/Family*, the proportion of an employee's family income that is accounted for by her income from the focal firm. Each regression includes firm fixed effects and year fixed effects. Standard errors are corrected for heteroskedasticity and within-firm clustering. To ease reading, the coefficients on *Wage* and *MaleRatio* are multiplied by 1,000 and 100, respectively. We report t-statistics in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A: Regression of Leverage on *Focal/Personal*

Dep. Var.	***BookLev***		***MktLev***	
	(1)	(2)	(3)	(4)
Manager Focal/Personal	-0.008	0.028	-0.067	-0.036
	(-0.13)	(0.47)	(-1.24)	(-0.66)
Focal/Personal		-0.095**		-0.082**
		(-2.33)		(-2.29)
LnAsset	0.017	0.018	0.016*	0.016*
	(1.47)	(1.54)	(1.70)	(1.79)
ROA	-0.034	-0.035	-0.015	-0.015
	(-1.51)	(-1.54)	(-0.83)	(-0.85)
PPEAsset	0.243***	0.244***	0.225***	0.226***
	(3.75)	(3.80)	(4.33)	(4.40)
TobinQ	0.000	0.000	-0.008***	-0.008***
	(0.19)	(0.23)	(-5.72)	(-5.81)
AltmanZscore	-0.004***	-0.004***	-0.003***	-0.003***
	(-2.65)	(-2.62)	(-2.76)	(-2.73)
LnAge	0.042**	0.044**	0.052***	0.053***
	(2.37)	(2.47)	(3.10)	(3.19)
Education	-0.011	-0.009	-0.001	0.001
	(-0.70)	(-0.56)	(-0.09)	(0.06)
WhiteRatio	0.059	0.066	0.151**	0.157**
	(0.80)	(0.90)	(2.22)	(2.31)
Wage	-0.363**	-0.372**	-0.470***	-0.478***
	(-2.41)	(-2.48)	(-3.69)	(-3.76)
LnEmpAge	0.161	0.167	0.064	0.069
	(1.51)	(1.56)	(0.93)	(1.00)
MaleRatio	0.077*	0.082*	0.079**	0.084**
	(1.67)	(1.78)	(2.08)	(2.18)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	6,000	6,000	6,000	6,000
R-squared	0.747	0.748	0.795	0.796

Panel B: Regression of Leverage on *Focal/Family*

Dep. Var.	***BookLev*$_t$**		***MktLev*$_t$**	
	(1)	(2)	(3)	(4)
Manager Focal/Family$_t$	-0.036	-0.017	-0.042	-0.026
	(-0.74)	(-0.35)	(-0.84)	(-0.53)
Focal/Family$_t$		-0.150***		-0.122**
		(-2.81)		(-2.48)
LnAsset$_t$	0.010	0.012	0.011	0.012
	(0.71)	(0.81)	(0.89)	(1.00)
ROA$_t$	-0.029	-0.030	-0.005	-0.006
	(-1.05)	(-1.09)	(-0.23)	(-0.28)
PPEAsset$_t$	0.261***	0.264***	0.262***	0.264***
	(3.26)	(3.36)	(4.04)	(4.18)
TobinQ$_t$	0.000	0.000	-0.008***	-0.008***
	(0.01)	(0.03)	(-4.54)	(-4.64)
AltmanZscore$_t$	-0.004**	-0.004**	-0.003**	-0.003**
	(-1.98)	(-1.98)	(-2.26)	(-2.26)
LnAge$_t$	0.037	0.042	0.039	0.043*
	(1.40)	(1.56)	(1.55)	(1.69)
Education$_t$	-0.016	-0.013	-0.008	-0.006
	(-0.75)	(-0.62)	(-0.49)	(-0.36)
WhiteRatio$_t$	0.105	0.122	0.164**	0.178**
	(1.16)	(1.35)	(2.06)	(2.22)
Wage$_t$	-0.501***	-0.499***	-0.568***	-0.566***
	(-2.67)	(-2.64)	(-3.70)	(-3.63)
LnEmpAge$_t$	0.097	0.098	0.050	0.051
	(0.75)	(0.75)	(0.56)	(0.58)
MaleRatio$_t$	0.047	0.070	0.077*	0.095**
	(0.90)	(1.33)	(1.69)	(2.05)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	4,100	4,100	4,100	4,100
R-squared	0.777	0.778	0.826	0.827

Table 6: Cross Sectional Analysis: Low and High Labor Intensity Firms

This table conducts subsample analysis separately for low and high labor intensity firms. Labor intensity is measured using the *Emp/AT* measure, calculated as the ratio of the number of employees to total book assets. We divide sample firms into two groups based on the median of the *Emp/AT* measure each year, and estimate the correlation between leverage and employee risk aversion for the two subsamples separately. Definitions of other variables are in the Appendix. Panel A reports regressions on *Focal/Personal*, the proportion of an employee's personal income that is accounted for by her income from the focal firm. Panel B reports regressions on *Focal/Family*, the proportion of an employee's family income that is accounted for by her income from the focal firm. Each regression includes firm fixed effects and year fixed effects. Standard errors are corrected for heteroskedasticity and within-firm clustering. To ease reading, the coefficients on *Wage* and *MaleRatio* are multiplied by 1,000 and 100, respectively. We report t-statistics in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A: Regression of Leverage on *Focal/Personal*

Dep. Var.	***BookLev*$_t$**		***MktLev*$_t$**	
	(1)	(2)	(3)	(4)
	Low Emp/AT	*High Emp/AT*	*Low Emp/AT*	*High Emp/AT*
Focal/Personal$_t$	-0.044	-0.151**	-0.054	-0.127**
	(-0.87)	(-2.28)	(-1.15)	(-2.00)
LnAsset$_t$	0.077***	-0.003	0.053***	0.008
	(4.48)	(0.18)	(4.03)	(0.52)
ROA$_t$	-0.011	-0.035	-0.001	-0.027
	(-0.28)	(-1.12)	(-0.02)	(-1.08)
PPEAsset$_t$	0.232**	0.324***	0.250***	0.267***
	(2.18)	(3.73)	(3.04)	(3.50)
TobinQ$_t$	0.001	-0.001	-0.004***	-0.011***
	(0.23)	(-0.35)	(-2.88)	(-4.69)
AltmanZscore$_t$	-0.009***	-0.003	-0.007***	-0.003*
	(-2.69)	(-1.42)	(-2.73)	(-1.72)
LnAge$_t$	0.047*	0.032	0.040	0.039
	(1.93)	(0.98)	(1.60)	(1.24)
Education$_t$	0.000	-0.010	0.009	0.001
	(0.01)	(0.42)	(0.47)	(0.05)
WhiteRatio$_t$	0.003	0.159*	0.101	0.168*
	(0.02)	(1.79)	(1.09)	(1.85)
Wage$_t$	-0.544***	0.117	-0.595***	-0.198
	(-3.31)	(0.32)	(-4.05)	(-0.77)
LnEmpAge$_t$	0.093	0.187	-0.027	0.196*
	(0.72)	(1.20)	(-0.26)	(1.68)
MaleRatio$_t$	0.053	0.035	0.066	0.065
	(1.10)	(0.54)	(1.42)	(1.15)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes

Dep. Var.	***BookLev$_t$***		***MktLev$_t$***	
	(1)	(2)	(3)	(4)
	Low Emp/AT	*High Emp/AT*	*Low Emp/AT*	*High Emp/AT*
Observations	2,800	2,800	2,800	2,800
R-squared	0.77	0.787	0.862	0.788

Panel B: Regression of Leverage on *Focal/Family*

Dep. Var.	***BookLev$_t$***		***MktLev$_t$***	
	(1)	(2)	(3)	(4)
	Low Emp/AT	*High Emp/AT*	*Low Emp/AT*	*High Emp/AT*
Focal/Family$_t$	-0.100	-0.239***	-0.101	-0.205***
	(-1.30)	(-2.88)	(-1.38)	(-2.66)
LnAsset$_t$	0.061***	-0.005	0.042**	0.009
	(2.89)	(-0.22)	(2.47)	(0.44)
ROA$_t$	-0.020	-0.032	0.015	-0.023
	(-0.48)	(-0.89)	(0.42)	(-0.78)
PPEAsset$_t$	0.306**	0.308***	0.328***	0.262***
	(2.37)	(2.91)	(3.27)	(2.90)
TobinQ$_t$	0.001	-0.002	-0.004**	-0.011***
	(0.36)	(-0.44)	(-1.98)	(-4.14)
AltmanZscore$_t$	-0.007**	-0.003	-0.005**	-0.002
	(-2.15)	(-1.06)	(-2.26)	(-1.38)
LnAge$_t$	0.056	0.048	0.041	0.057
	(1.62)	(1.06)	(0.98)	(1.42)
Education$_t$	-0.018	-0.006	-0.003	0.004
	(-0.67)	(-0.20)	(-0.13)	(0.14)
WhiteRatio$_t$	0.045	0.215**	0.138	0.179*
	(0.36)	(2.15)	(1.21)	(1.75)
Wage$_t$	-0.663***	0.094	-0.674***	-0.246
	(-2.97)	(0.23)	(-3.60)	(-0.81)
LnEmpAge$_t$	-0.009	0.233	0.023	0.107
	(-0.06)	(1.13)	(0.17)	(0.77)
MaleRatio$_t$	0.041	0.038	0.035	0.124*
	(0.65)	(0.47)	(0.55)	(1.85)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	2,000	2,000	2,000	2,000
R-squared	0.788	0.818	0.872	0.819

Table 7: Cross Sectional Analysis: Low and High Distress Risk Firms

This table conducts subsample analysis separately for firms with low and high financial distress risk. Distress risk is measured using the Altman's Z-Score measure (not the modified version). The higher (lower) the AZ-Score, the lower (higher) the financial distress risk a firm has. We follow the literature and classify sample firms into the groups of low distress risk (AZ-Score>=2.99) and high distress risk (AZ-score <=1.81) for each year, and estimate the correlation between leverage and employee risk aversion for the two subsamples separately. Definitions of the variables are in the Appendix. Panel A reports regressions on *Focal/Personal*, the proportion of an employee's personal income that is accounted for by her income from the focal firm. Panel B reports regressions on *Focal/Family*, the proportion of an employee's family income that is accounted for by her income from the focal firm. Each regression includes firm fixed effects and year fixed effects. Standard errors are corrected for heteroskedasticity and within-firm clustering. To ease reading, the coefficients on *Wage* and *MaleRatio* are multiplied by 1,000 and 100, respectively. We report t-statistics in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A: Regression of Leverage on *Focal/Personal*

Dep. Var.	***BookLev***		***MktLev***	
	(1)	(2)	(3)	(4)
	AZ>=2.99	AZ<=1.81	AZ>=2.99	AZ<=1.81
$Focal/Personal_t$	-0.103**	-0.185*	-0.077**	-0.229**
	(-2.20)	(-1.78)	(-2.24)	(-2.12)
$LnAsset_t$	0.025**	-0.049*	0.010	0.005
	(2.42)	(-1.71)	(1.21)	(0.20)
ROA_t	-0.005	0.031	-0.014	0.056**
	(-0.24)	(1.18)	(-1.01)	(2.30)
$PPEAsset_t$	0.216***	0.077	0.135***	0.178
	(3.13)	(0.54)	(2.96)	(1.48)
$TobinQ_t$	0.006*	0.005	-0.006***	-0.020***
	(1.96)	(0.96)	(-3.76)	(-3.97)
$AltmanZscore_t$	0.000	-0.001	0.000	-0.006***
	(0.26)	(-0.71)	(0.40)	(-3.09)
$LnAge_t$	0.023	0.118	0.034	0.113*
	(1.01)	(1.60)	(1.35)	(1.68)
$Education_t$	-0.008	-0.021	0.008	0.005
	(-0.52)	(-0.61)	(0.54)	(0.15)
$WhiteRatio_t$	0.047	0.073	0.013	-0.005
	(0.72)	(0.36)	(0.21)	(-0.03)
$Wage_t$	-0.063	-0.467	-0.206**	-0.708
	(-0.45)	(-0.78)	(-2.10)	(-1.32)
$LnEmpAge_t$	-0.037	0.353	-0.017	0.332
	(-0.30)	(1.41)	(-0.17)	(1.58)
$MaleRatio_t$	-0.010	-0.002	0.007	0.089
	(-0.25)	(-0.02)	(0.19)	(1.28)

Dep. Var.	$BookLev_t$		$MktLev_t$	
	(1)	(2)	(3)	(4)
	AZ>=2.99	AZ<=1.81	AZ>=2.99	AZ<=1.81
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	2,300	1,000	2,300	1,000
R-squared	0.771	0.765	0.816	0.825

Panel B: Regression of Leverage on *Focal/Family*

Dep. Var.	$BookLev_t$		$MktLev_t$	
	(1)	(2)	(3)	(4)
	AZ>=2.99	AZ<=1.81	AZ>=2.99	AZ<=1.81
$Focal/Family_t$	-0.114	-0.299*	-0.113*	-0.359**
	(-1.48)	(-1.83)	(-1.94)	(-2.33)
$LnAsset_t$	0.022	-0.057	0.010	-0.003
	(1.47)	(-1.47)	(0.78)	(-0.09)
ROA_t	-0.008	0.026	-0.012	0.070**
	(-0.33)	(0.72)	(-0.69)	(2.24)
$PPEAsset_t$	0.213***	0.139	0.183***	0.241*
	(2.61)	(0.82)	(2.99)	(1.88)
$TobinQ_t$	0.006*	0.002	-0.005**	-0.021***
	(1.80)	(0.47)	(-2.48)	(-3.34)
$AltmanZscore_t$	-0.001	-0.002	0.000	-0.007**
	(-0.44)	(-0.73)	(0.03)	(-2.59)
$LnAge_t$	0.029	0.158	0.041	0.160
	(0.75)	(1.20)	(1.06)	(1.35)
$Education_t$	-0.014	-0.004	0.003	0.004
	(-0.68)	(-0.09)	(0.13)	(0.10)
$WhiteRatio_t$	0.018	0.162	0.023	0.007
	(0.21)	(0.68)	(0.25)	(0.04)
$Wage_t$	-0.252	-0.362	-0.252**	-0.630
	(-1.51)	(-0.57)	(-2.33)	(-1.01)
$LnEmpAge_t$	-0.082	0.268	0.108	0.251
	(-0.57)	(0.80)	(0.70)	(0.84)
$MaleRatio_t$	0.055	0.034	0.024	0.160*
	(0.92)	(0.31)	(0.42)	(1.90)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	1,400	790	1,400	790
R-squared	0.816	0.777	0.855	0.842

Table 8: Regression of Risk-Aversion Measures of New Hires on Lagged Leverage

This table reports the OLS regression results of job risk aversion measures for new hires on lagged leverage. *NewHireXXX* means the measure of "*XXX*" is constructed only using new hires. Definitions of the other variables are in the Appendix. Panel A reports regressions on *Focal/Personal*, the proportion of an employee's personal income that is accounted for by her income from the focal firm. Panel B reports regressions on *Focal/Family*, the proportion of an employee's family income that is accounted for by her income from the focal firm. Each regression includes firm fixed effects and year fixed effects. Standard errors are corrected for heteroskedasticity and within-firm clustering. To ease reading, the coefficients on *Wage* are multiplied by 1,000, and the coefficients on *WhiteRatio* and *NewHireWhiteRatio* are multiplied by 100. We report t-statistics in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A: Regression of *Focal/Personal* of New Hires

Dep. Var.	***NewHire Focal/Personal*** $_{t+1}$					
	(1)	(2)	(3)	(4)	(5)	(6)
BookLev $_t$	-0.015**	-0.014**	-0.015**			
	(-2.29)	(-2.05)	(-2.29)			
MktLev $_t$				-0.021***	-0.019***	-0.019***
				(-4.42)	(-3.59)	(-3.76)
LnAsset $_t$		0.001	0.002		0.001	0.002
		(0.43)	(1.18)		(0.59)	(1.34)
ROA $_t$		0.017	0.016		0.015	0.013
		(1.53)	(1.38)		(1.30)	(1.16)
PPEAsset $_t$		0.008	0.015		0.008	0.015
		(0.64)	(1.29)		(0.70)	(1.34)
TobinQ $_t$		0.002**	0.002**		0.001*	0.001
		(2.50)	(2.17)		(1.73)	(1.43)
AltmanZscore $_t$		-0.001	-0.001		-0.001	-0.001
		(-1.28)	(-0.89)		(-1.44)	(-1.03)
LnAge $_t$		-0.006*	-0.006*		-0.006	-0.006*
		(-1.72)	(-1.78)		(-1.61)	(-1.66)
Education $_t$			0.014***			0.014***
			(4.57)			(4.57)
WhiteRatio $_t$			0.023**			0.024**
			(2.02)			(2.08)
Wage $_t$			0.189***			0.183***
			(3.02)			(2.92)
LnEmpAge $_t$			0.038			0.038
			(1.53)			(1.54)
MaleRatio $_t$			0.024*			0.024*
			(1.83)			(1.85)
NewHireEducation $_{t+1}$			0.008***			0.008***
			(4.10)			(4.11)
NewHireWhiteRatio $_{t+1}$			0.037***			0.037***
			(4.55)			(4.53)

Dep. Var.	***NewHire Focal/Personal*$_{t+1}$**					
	(1)	(2)	(3)	(4)	(5)	(6)
LnNewHireEmpAge$_{t+1}$			0.077***			0.077***
			(5.84)			(5.83)
NewHireMaleRatio$_{t+1}$			0.016*			0.016*
			(1.87)			(1.87)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	34,000	34,000	34,000	34,000	34,000	34,000
R-squared	0.680	0.680	0.686	0.680	0.681	0.687

Panel B: Regression of *Focal/Family* of New Hires

Dep. Var.	***NewHire Focal/Family*$_{t+1}$**					
	(1)	(2)	(3)	(4)	(5)	(6)
BookLev$_{t}$	-0.061***	-0.061***	-0.063***			
	(-3.32)	(-3.15)	(-3.28)			
MktLev$_{t}$				-0.040***	-0.035**	-0.037**
				(-3.01)	(-2.38)	(-2.57)
LnAsset$_{t}$		0.007	0.013**		0.006	0.013**
		(1.12)	(2.22)		(1.00)	(2.06)
ROA$_{t}$		0.008	0.007		0.007	0.005
		(0.36)	(0.32)		(0.29)	(0.23)
PPEAsset$_{t}$		0.062*	0.077**		0.061*	0.076**
		(1.70)	(2.15)		(1.68)	(2.12)
TobinQ$_{t}$		0.004**	0.005***		0.004**	0.004**
		(2.36)	(2.83)		(1.97)	(2.40)
AltmanZscore$_{t}$		0.000	0.001		0.001	0.002
		(0.26)	(0.60)		(0.60)	(0.94)
LnAge$_{t}$		0.001	-0.001			-0.001
		(0.08)	(-0.08)			(-0.04)
Education$_{t}$			0.026**			0.026**
			(2.51)			(2.54)
WhiteRatio$_{t}$			0.061*			0.061*
			(1.65)			(1.65)
Wage$_{t}$			-0.196			-0.197
			(-1.41)			(-1.42)
LnEmpAge$_{t}$			-0.028			-0.031
			(-0.41)			(-0.46)
MaleRatio$_{t}$			0.074**			0.075**
			(1.96)			(1.99)
NewHireEducation$_{t+1}$			0.018***			0.018***
			(4.53)			(4.53)
NewHireWhiteRatio$_{t+1}$			0.036**			0.035*
			(1.98)			(1.94)

Dep. Var.	***NewHire Focal/Family*$_{t+1}$**					
	(1)	(2)	(3)	(4)	(5)	(6)
LnNewHireEmpAge$_{t+1}$			0.205***			0.204***
			(6.50)			(6.48)
NewHireMaleRatio$_{t+1}$			0.129***			0.129***
			(6.97)			(6.96)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	23,000	23,000	23,000	23,000	23,000	23,000
R-squared	0.720	0.720	0.724	0.719	0.720	0.724